

REMARKS

Claim 1-64 and 72 have been canceled. Claims 65-71 and 73-74 are currently pending in the application, and stand rejected under 35 U.S.C. §§ 112 and 102.

35 U.S.C. § 112

Claims 65-74 stand rejected under 35 U.S.C. § 112, first paragraph, as allegedly containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Applicants respectfully disagree.

The examiner avers that various features recited in the claims are unclear, and states that the features were not disclosed in the original specification and are therefore considered new matter. Applicants would first like to review the state of the law regarding the written description requirement under 35 U.S.C. § 112, first paragraph. “[T]he specification ‘need not describe the claimed subject matter in exactly the same terms as used in the claims; it must simply indicate to persons skilled in the art that . . . the applicant had invented what is now claimed.’” *All Dental Prodx, LLC v. Advantage Dental Products, Inc.*, 309 F.3d 774, 779 (Fed. Cir. 2002). Further, the Patent & Trademark Office Board of Appeals and the Federal Circuit both recognize that the drawings included in an application can provide the written description support for claimed features:

The test for determining compliance with the written description requirement is whether the disclosure of the application as originally filed reasonably conveys to the artisan that the inventor had possession at that time of the later claimed subject matter, rather than the presence or absence of literal support in the specification for the claim language. *In re Edwards*, 568 F.2d 1349, 196 U.S.P.Q. (BNA) 465 (CCPA 1978); *In re Herschler*, 591 F.2d 693, 200 U.S.P.Q. (BNA) 711 (CCPA 1979). The content of the drawings may also be considered in determining compliance with the written description requirement. *In re Barker*, 559 F.2d 588, 194 U.S.P.Q. (BNA) 470 (CCPA 1977).

In re Walter Kaslow and Uniform Product Code Counsel, Inc. 707 F.2d 1366 (Fed. Cir. 1983). Moreover, the drawings alone may satisfy the written description requirement.

See, e.g., Cooper Cameron Corp. v. Kvaerner Oilfield Products, Inc., 291 F.3d 1317, 1322 (Fed. Cir. 2002) (“In *Vas-Cath*, we held that ‘under proper circumstances, drawings alone may provide a ‘written description’ of an invention as required by § 112.’”); *In re Robert M. Hunter*, 1995 U.S. App. LEXIS 15363, *14-15 (Fed. Cir. 1995) (“Depending on the facts of each particular case, one may satisfy the written description requirement using, for example, drawings, tables, equations, and formulas, alone or in combination.”). Accordingly, the drawings can play an important, even primary, role in assessing whether the written description requirement has been satisfied. This makes sense because features that are actually shown in patent figures accompanying an as-filed specification were clearly within the possession of the inventor(s) at the time the application is filed. These same features will also be reasonably conveyed to a skilled artisan reviewing the patent figures, even without the skilled artisan reading a single word.

The Section 112 rejections directed to individual claims will be discussed in turn below.

Claim 65:

Regarding claim 65, the examiner states that “it is unclear what part of the insulative body is referred as ‘a mating surface’ ‘a second surface’; lines 7-8, the features ‘a heat dissipation opening...receiving cavity.’” The specification illustrates and discusses numerous embodiments of matable plug and receptacle connectors. For example, Figures 23 and 24 show a plug connector 290 and a matable receptacle connector 300 (*see also*, the description on pages 12 and 13). Receptacle connector 300 includes a housing 302 having a front surface 304. A person of skill in the art would clearly understand by simply looking at Figure 23 that front surface 304 is the recited “mating surface.” Furthermore, the specification refers to such a front surface as a mating interface in connection with alternative embodiments shown in Figures 10-14 – “[t]he front side 130 forms a mating interface of the [receptacle] connector 128 for mating with plug connector 75” (page 7, lines 13-14). The drawings and text of the as-filed specification make it clear that there is only one way that the plug and receptacle connectors properly mate together, such that a skilled artisan, after reviewing the same, is left with no doubt which housing surface is the recited “mating surface.”

Claim 65 further recites “a second surface positioned generally perpendicular to said mating surface.” Referring again to Figures 23 and 24 to facilitate the present discussion, each of the plug and receptacle connectors have a housing top wall that is both shown and referenced in the written description on pages 12-13. The respective connector top walls unequivocally represent a second surface that is positioned generally perpendicular to the connector mating surface, and a skilled artisan would clearly understand the same.

With respect to the heat dissipation opening feature recited in the claim, the top wall of plug connector housing 292 has openings 298, while the top wall of receptacle connector housing 302 has openings 306. The specification states that “[o]penings 298 can also provide air flow passages for enhancing heat dissipation” (page 12, lines 25-26). Figures 23 and 23a (cross-sectional view of Figure 23) show that openings 298 are fluidly connected to contact receiving cavities in connector housing 292. The connectivity of heat dissipation openings to contact receiving cavities is also evinced by the description of Figure 23a on page 12, lines 15-22, which references a “contact receiving cavity” and describes a positioning of openings 298 relative to features of a contact disposed within the contact receiving cavity.

Claims 66-71 and claim 73

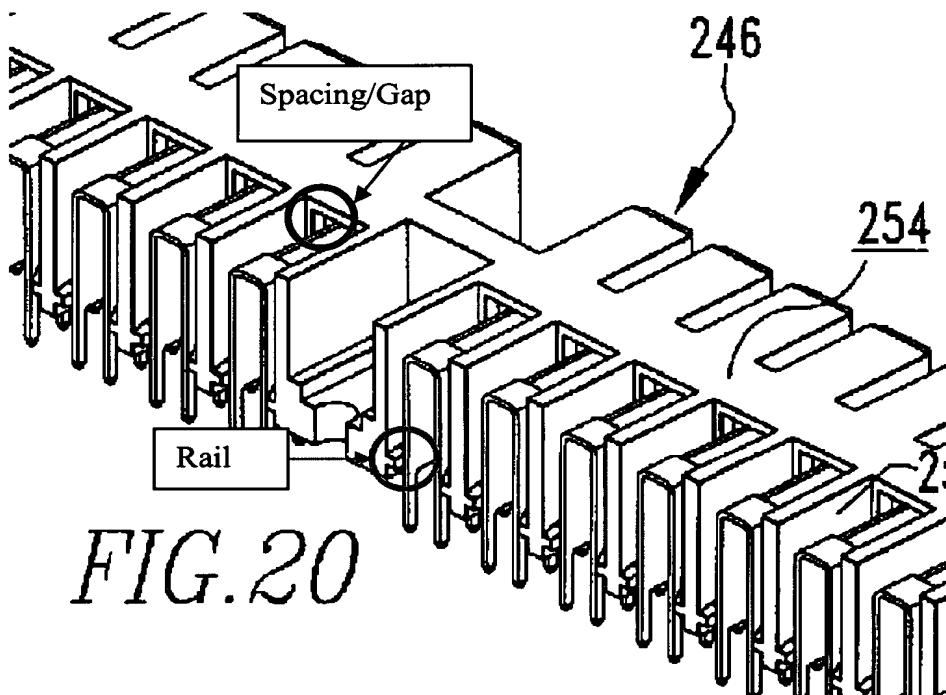
The examiner states that “claims 66-71 features are unclear” and “claim 73 features...are confusing and unclear.” Applicants respectfully disagree. Moreover, Applicants cannot address the propriety of this rejection since the office action does not point to any particular feature recited in the claims that is allegedly unclear. Applicants would however be happy to participate in an examiner interview to discuss the features of claims 66-71 and claim 73, and to point out the support provided in the written description and drawings set forth in the as-filed specification.

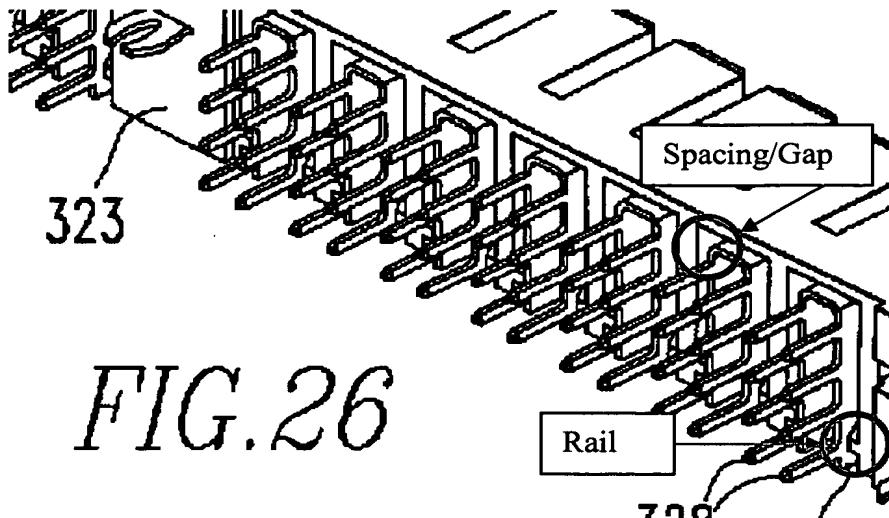
Claim 72

Claim 72 has been canceled, thereby obviating the Section 112 rejection directed to this claim.

Claim 74

The examiner states that “the features ‘wherein a substantial portion of at least one of the first planar panel and the second planar panel is spaced from an adjacent housing wall such that heat dissipation can also occur from an exterior contact surface’ [is] confusing and unclear.” Applicants respectfully disagree. Several of the connector embodiments shown in the figures clearly show at least one of the planar contact panels being spaced apart from adjacent housing structure. By way of example, portions of Figures 20 and 26 are reproduced below to illustrate the spacing or gap (highlighted with a red circle) between a contact panel and an adjacent cavity (housing) sidewall.





And as noted above, the drawings in patent applications, particularly in electro-mechanical cases, provide “written description” support to comply with the first paragraph of 35 U.S.C. § 112. As can be seen in the above figures, the contact receiving cavities can optionally employ “rails” (highlighted with a blue circle) extending inwardly from their side walls. Such rails maintain spacing between the contact panels and the adjacent housing structure. Furthermore, some of the preferred contact embodiments employ a laterally extending tang, such that an associated contact wall/panel will necessarily be spaced from an adjacent housing/cavity wall. For example, plug contact 208 (shown in Figure 17 and reproduced below) employs a tang 222 which is said to “center[] the contact within cavities 212 in housing 222” (page 9, lines 4-6). The Federal Circuit in *All Dental Prodx*, stated that “the failure of the specification to specifically mention a limitation that later appears in the claims is not a fatal one when one skilled in the art would recognize [it] upon reading the specification.” 309 F.3d at 779.

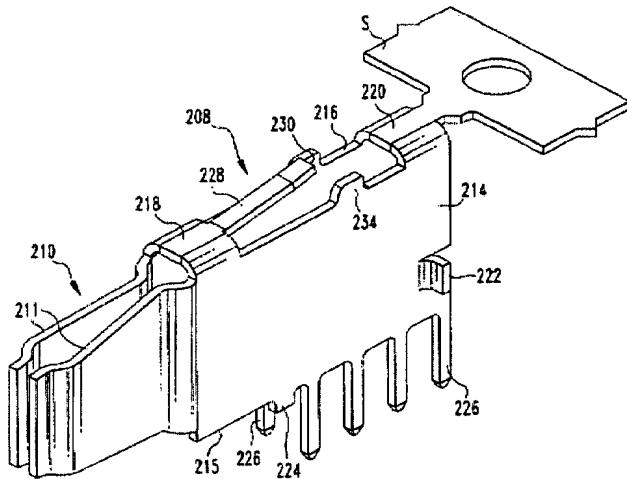


FIG. 17

With the contact panel being spaced from an adjacent housing wall via contact and/or housing features, heat loss can occur (primarily via convection) – one of the features of the current invention that is discussed repeatedly throughout the specification (see, e.g., page 2, lines 16-20 and page 15, lines 21 to page 16, line 1).

In view of the above discussion, Applicants respectfully request reconsideration and withdrawal of the Section 112 rejections.

35 U.S.C. § 102

Claims 65-74 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Davis et al. (U.S. Pat. No. 5,295,843).

Davis does not anticipate claims 65-74 since the reference fails to teach or suggest each and every feature recited in the claims. Regarding claims 65-71, Davis does not disclose, *inter alia*, a heat dissipation opening formed in a housing surface positioned generally perpendicular to the housing mating surface. In contrast, Davis teaches a connector housing wherein each of the housing surfaces that are positioned perpendicular to the mating surface (both sides, the top side and the bottom side) is completely solid; i.e., a heat dissipation opening does not exist.

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PATENT
REPLY FILED UNDER EXPEDITED
PROCEDURE PURSUANT TO
37 CFR § 1.116

Claim 72 has been canceled, and thus, the rejection directed to this claim is moot. Regarding claim 73, Davis does not disclose, *inter alia*, vertical partitions extending from housing wall to form power contact retaining slots.

Regarding claim 74, Davis does not disclose, *inter alia*, a substantial portion of at least one of the contact panels (as interpreted by the examiner) being spaced from adjacent housing structure. When viewing the contact shown in Figure 3 of Davis, the examiner interprets the two structures extending from element 17 as the recited first and second planar panels (see, e.g., Office Action dated 9/25/02). Turning now to Figures 6 and 7, the interpreted first and second planar panels abut up against the adjacent housing structure – pocket 18 – such that no spacing exists.

In view of the foregoing, Applicants request reconsideration and withdrawal of the Section 102 rejections.

Conclusion

All of the pending claims are believed to be patentable in light of the above discussion. If the examiner disagrees with this position, then Applicants respectfully request an interview prior to the issuance of any further official action. The undersigned attorney can be reached at 215-557-5907 or 215-568-3100.

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